

REMARKS

In response to the office action of April 29, 2009, applicant provides the following comments. Claim 1, 8-10, 12 and 14-15 are amended. Claims 1, 10, 14 and 15 are amended to correct typographical errors. Claims 8 and 9 are amended to include the term “comprising”. Claims 18-20 are new. Support for the amendment to claim 12 and new claims can be found at least on page 3, line 26- page 4, line 1, page 7, lines 4-8, and page 8, lines 6-8 of the specification as filed. Applicant respectfully requests reconsideration in view of the foregoing remarks.

Section 102 Rejections

Claims 1-9, 12-13, and 16-17 were rejected as anticipated by U.S. Patent No. 5,294,870 (“Tang”). Applicant respectfully disagrees, at least because Tang does not describe a color filter.

Tang shows a device with an electrically insulative planarizing layer 101 over a patterned fluorescent medium G that emits green and a patterned fluorescent medium R that emits red (FIG. 2, col. 3, lines 33-54, col. 4, lines 14-33). The planarizing layer 101 is spin cast over the green and red fluorescent media to provide a smooth surface for deposition of the next layer of the device (col. 4, lines 34-57). An EL medium emits in the blue region of the spectrum (col. 8, lines 8-13). The blue light emitted from the EL medium penetrates electrodes and the planarizing layer 101, but in the green and red sub-pixels, the fluorescent media G and R intercepts and absorbs the blue light emitted by the organic EL medium (col. 8, lines 14-22). The blue light stimulates fluorescent emission in the green or red.

Claim 1 is directed to a color organic display having pixels. The pixels comprise a subpixel set. The subpixel set includes a structured color filter, which generates the colors of the subpixel set. At least one active layer is on the first electrode. The active layer contains an emissive material, which is suitable for the generation of electromagnetic radiation. The spectrum of the electromagnetic radiation is matched to the color filter such that the pixels during control with the same electrical signal emit light whose color location lies within the white region of the CIE diagram.

Tang fails to disclose a color filter. Rather, Tang describes a planarizing layer 101, which is not described as performing any color filtering. Tang also describes a fluorescent medium R and G. Tang's fluorescent medium does not form a filter. Rather, the fluorescent medium R or G absorbs blue light and reradiates either red or green light. Moreover, Tang suggests that its device is preferable to a device that uses filters. "The multicolor organic electroluminescent image display devices of the invention are also more efficient than devices that emit white light and depend on a patterned color filter array for a multicolor imaging capability." (col. 2, lines 35-40) "In addition, no filter element is required that selectively transmits only a portion of light received." (col. 2, lines 62-64) Tang fails to describe a spectrum of electromagnetic radiation being matched to the color filter such that the pixels during control with the same electrical signal emit light whose color location lies within the white region of the CIE diagram.

The Examiner bases the rejection of claim 1 on the planarizing layer 101, however this layer is not a filter. The Examiner rejects claim 2, which is directed to the emissive material, based on Tang's disclosure of the red and green fluorescent material (see page 3 of office action, point 6), but Tang's fluorescent material is part of Tang's EL layer. Nor is it material that has a spectrum that is matched to a color filter. For at least these reasons, applicant submits that claim 1 and the claims that depend therefrom are not anticipated by Tang.

Amended claim 12 is directed to an organic device having a structured colored filter having a plurality of fields, wherein each field corresponds to a colored subpixel and transmits light with a color of the colored subpixel, and a red subpixel, a blue subpixel and a green subpixel form a pixel. An electrode is on the colored filter. An active layer is on the first electrode, comprising an emissive material that is capable of emitting electromagnetic radiation comprising red, green and blue light. A second electrode is on the active layer. Upon driving the red subpixel, the blue subpixel and the green subpixel with a single selected current, the pixel is a white light pixel.

As noted above, Tang fails to describe a filter. Further, Tang fails to disclose an active layer comprising an emissive material that is capable of emitting electromagnetic radiation

comprising red, green and blue light. Rather, Tang describes an EL medium that emits blue light and a separate fluorescent medium that emit red or green light. Therefore, Tang does not describe an active layer that is capable of emitting electromagnetic radiation comprising red, green and blue light.

Tang notes that the efficiency of the blue pixels is approximately 100%, while the efficiency of the fluorescent medium is closer to 64% (col. 9, lines 1-9). Thus, there is no indication that upon driving the red, blue and green portions of Tang's pixel at a single selected current that white light would be achieved. Rather, it seems that the light might be skewed, e.g., to the blue. Applicant therefore submits that after amendment of claim 12, Tang does not anticipate claim 12. Similar reasons apply to the claims that depend from claim 12.

Section 103 Rejections

Claims 10-11 and 14-15 are rejected as unpatentable over Tang in view of U.S. Patent No. 2005/0123760 ("Cammack"). Applicant respectfully disagrees.

Like Tang, Cammack fails to disclose a color filter, as required by claims 1 and 12. For at least this reason, applicant submits that claims 10-11 and 14-15 are not unpatentable over Tang in view of Cammack.

New Claims

Claims 18-20 are new. All of the new claims require a color filter and are therefore not anticipated by or unpatentable over Tang and/or Cammack.

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Respectfully submitted,

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